Just what the doctor ordered? Investigating the impact of health service quality on consumer misbehaviour

Dominique A. Greer*[a]

Rebekah Russell-Bennett[a]

Alastair Tombs[b]

Judy Drennan[a]

[a]*QUT Business School, Queensland University of Technology, 2 George St, Brisbane, Queensland 4001 AUSTRALIA*

[a]*UQ Business School, University of Queensland, St Lucia, Queensland 4072 AUSTRALIA*

**Corresponding author (Ph: +61 7 3138 2987; dominique.greer@qut.edu.au)*

Abstract

The growth in demand and expenditure currently being experienced in the Australian health sector is also accompanied by a rise in dysfunctional customer behaviour, such as verbal abuse and physical violence, perpetrated against health service providers. While service failure and poor recovery is known to trigger consumer misbehaviour, this study investigates whether lower than expected perceived service quality generates cognitive and emotional appraisals that trigger two common forms of misbehaviour: refusal to participate and verbal abuse. Data were collected using a 2 x 2 between-subjects experiment administered via online written survey and analysed using path modelling. The findings indicate that perceptions of service encounter quality have an indirect effect on whether consumers refuse to participate in the service and/or verbally abuse the service provider through the mediating effect of anger.

Keywords: consumer misbehaviour, service quality, anger, perceived justice, health care, experimental design

1.0 Introduction

Health services in Australia represent 9.5% of GDP and expenditure has grown from $82.9 billion in 2001 to $140.2 billion in 2012 (Australian Institute of Health and Welfare, 2013). The growth in demand and expenditure being experienced in this sector, however, has been accompanied by a rise in consumer misbehaviour (Dyett, 2013). This rise has alarmed policymakers to the extent that it has sparked a national survey by the Australian National Preventative Health Agency (Dyett, 2013) in order to quantify the problem.

Extant research suggests that consumer misbehaviour is a significant source of role stress and emotional labour (Ben-Zur & Yagil, 2005). Burnout across a range of service industries is increasing due to the prevalence of disproportionate customer expectations, verbal aggression, and ambiguous customer expectations (Dormann & Zapf, 2004). Health care providers in particular experience a slew of negative outcomes – lower affective commitment, higher intentions to withdraw, poorer interpersonal job performance, greater neglect, and more cognitive difficulties – when exposed to patient violence and sexual harassment (Barling, Rogers, & Kelloway, 2001). Given the importance of this sector to the Australian economy and the growing demand for health due to an aging population, understanding how to mitigate and manage consumer misbehaviour in health care services is critical to create a sustainable service model.

While consumer misbehaviour is often investigated following service failure and recovery (e.g., Grégoire & Fisher, 2006; Dominique A. Keeffe, Russell-Bennett, &

Tombs, 2008; McColl-Kennedy, Patterson, Smith, & Brady, 2009), there is a paucity of research that investigates whether lower than expected perceived service quality is capable of generating cognitive and emotional appraisals that trigger misbehaviour. This research gap presents an important line of inquiry because the service quality perceptions of consumers and service providers might not always align. In the absence of service failure, service employees may perceive that appropriate service quality was delivered, while consumers may appraise the same service encounter as lacking and thus respond with misbehaviour.

To address this gap, we investigate how perceived service quality influences consumers' emotional, cognitive, and behavioural responses to the health services. We use Social Exchange Theory (Blau, 1964) as a theoretical framework to propose that technical and interpersonal quality will influence consumers' cognitive and affective appraisals of the service encounter, which may in turn trigger misbehaviour. More specifically, we investigate the likelihood that consumers would refuse to participate in a service or verbally abuse a service provider, as these are the two most commonly observed forms of misbehaviour in health services (Dominique A. Keeffe, 2010). By investigating consumer misbehaviour within high credence professional services such as health care, this research answers Harris and Reynolds's (2004) call for further study on consumer misbehaviour in different service environments.

2.0 Literature review

2.1 Consumer misbehaviour in service encounters

Since the inception of the marketing discipline, exchange has been a focal concept of interest (Houston & Gassenheimer, 1987). Exchange was initially conceptualised from a purely economic, transactional standpoint: the benefits and obligations of an interaction were explicit and contractually enforceable (Blau, 1964). The rise of the service economy, however, has led marketers to consider the social aspects of exchange (Vargo & Lusch, 2004, 2008). Social exchange is predicated on the understanding that both parties need to behave in a mutually beneficial and complementary manner for their individual goals to be achieved (Blau, 1964; Cropanzano & Mitchell, 2005).

Conceptualising service encounter behaviour as mutually beneficial and complementary, however, implies that both the consumer and the service provider will behave in a functional manner (Fullerton & Punj, 1993; Harris & Ogbonna, 2002). In practice, service roles have ‘a unique, and distressing, feature’ (Ben-Zur & Yagil, 2005, p. 81): service providers are held to a higher behavioural standard than their consumers. While service providers are compelled to exhibit appropriate interpersonal behaviour towards consumers by virtue of their employment, consumers have no such formal behavioural obligations (Ben-Zur & Yagil, 2005; Namasivayam, 2003). These asymmetrical behavioural expectations give rise to a new concern for marketers: consumer misbehaviour.

Consumer misbehaviour is defined as 'behavioural acts by consumers, which violate the generally accepted norms of conduct in consumption situations, and thus disrupt the consumption order' (Fullerton & Punj, 2004, p. 1239; Moschis & Cox, 1989). This definition includes acts that are performed unintentionally, out of ignorance of norms,

and in response to the deviant behaviour of others in the servicescape. Consumer misbehaviour has previously been referred to as deviant customer behaviour (Moschis & Cox, 1989), aberrant customer behaviour (Fullerton & Punj, 1993), opportunistic behaviour (Gruen, 1995), dysfunctional customer behaviour (Harris & Reynolds, 2003), badness behaviour (Yi & Gong, 2006), and customer rage (McColl-Kennedy et al., 2009), which is perpetrated by problem customers (Bitner, Booms, & Mohr, 1994), jaycustomers (Lovelock, 1994), and customers from hell (Zemke & Anderson, 1990). Regardless of label, the disruptive nature of this behaviour is problematic because it obstructs the co-creation of value.

Since its emergence as a field of interest in the 1990s, extant research has identified a broad range of consumer misbehaviour that flouts the expectations of exchange. Initial investigations of misbehaviour focused on identifying how consumers inappropriately acquire goods using methods such as counterfeiting (e.g., Albers-Miller, 1999), fraud (e.g., Wilkes, 1978), or theft (e.g., Cox, Cox, & Moschis, 1990). In contrast, more recent research focuses on identifying how consumers misbehave interpersonally. Such misbehaviour includes retaliation (e.g., Funches, Markley, & Davis, 2009; Grégoire & Fisher, 2006, 2007), lying (e.g., Mazar, Amir, & Ariely, 2008), rage (e.g., Grove, Pickett, Jones, & Dorsch, 2012; McColl-Kennedy et al., 2009; Patterson, McColl-Kennedy, Smith, & Lu, 2009; Surachartkumtonkun, Patterson, & McColl-Kennedy, 2013), and verbal and physical abuse (e.g., Rafaeli et al., 2012). Interpersonal misbehaviour is typically psychologically harmful to the service provider, which has flow-on effects to the service organisation due to burnout, absenteeism, and turnover.

The research examines two forms of interpersonal consumer misbehaviour: refusal to participate and verbal abuse. The first behaviour, refusal to participate, refers to the behaviour of consumers who actively choose not to contribute actions or resources to a service encounter but still expect a successful outcome (Dominique A. Keeffe, 2010). Essentially, these consumers refuse to fully participate in co-creating the service. Refusal to participate is not yet a well-understood form of consumer misbehaviour; however, qualitative research suggests that it is particularly salient in health services because consumers contribute to the technical and functional quality of the service encounter (Dominique A. Keeffe, 2010; Kelley, Donnelly, & Skinner, 1990). The second behaviour, verbal abuse, is defined as the misuse of words and encompasses overt oral and/or written communication that impeded service encounters (Dominique A. Keeffe, 2010). Verbal abuse is the most commonly reported type of consumer misbehaviour in service encounters (Bitner et al., 1994; Harris & Reynolds, 2004; Lovelock, 2001) and is prevalent in health care (Yagil, 2008). Further, such abuse often co-occurs with refusal to participate (Dominique A. Keeffe, 2010).

Forms of consumer misbehaviour such as refusing to participate and verbal abuse are typically investigated as outcomes of service failure and recovery (Grégoire & Fisher, 2006; Dominique A. Keeffe et al., 2008; McColl-Kennedy et al., 2009). There is a paucity of research, however, that investigates whether lower than expected perceived service quality is capable of generating cognitive and emotional appraisals that can trigger these forms of misbehaviour in health care encounters.

2.2 The impact of service quality on consumer misbehaviour

Perceived service quality is one of the most salient and well-conceptualised constructs in services marketing (Brady & Cronin, 2001; Cronin & Taylor, 1992). Perceptions of service quality are generally defined as 'a consumer's judgment of, or impression about, an entity's overall excellence or superiority' (Dagger, Sweeney, & Johnson, 2007, p. 124). In a health service context, such perceptions result from an assessment of four service quality dimensions: interpersonal quality, technical quality, environment quality, and administrative quality (Dagger et al., 2007).

Although all four quality dimensions are critical to the overall perception of service quality, not all of the dimensions evaluate the one-to-one nature of health service encounters. For example, environment quality is an evaluation of the features of the servicescape, while administrative quality is an evaluation of the service elements that 'facilitate the production of the core service while adding value to a customer's use of a service' (Dagger et al., 2007, p. 126). However, two dimensions do evaluate the one-to-one nature of health care encounters: interpersonal quality, an evaluation of the dyadic interaction between the social actors, and technical quality, an evaluation of the 'expertise, professionalism, and competency of the service provider in delivering the service' (Dagger et al., 2007, p. 126). Consequently, this research focuses on technical and interpersonal service quality.

Consumers' evaluations of both interpersonal and technical service quality significantly influence their subsequent behaviour. For example, a low level of technical quality reduces trust in professional service providers and in turn the relationship commitment displayed by the consumer (Sharma & Patterson, 1999). Similarly, low levels of interpersonal service quality reduce future patronage

intentions (Lee & Yang, 2013). Following this trend, we propose that low levels of both interpersonal and technical service quality are likely to increase the likelihood of consumers refusing to participate and/or verbally abusing health care employees. Thus, the first two hypotheses are presented below:

H1. Interpersonal service quality is negatively related to (a) refusal to participate and (b) verbal abuse.

H2. Technical service quality is negatively related to (a) refusal to participate and (b) verbal abuse.

2.3 The mediating role of perceived justice

Theorists have long understood that the success of service exchange hinges on each party's perceptions of equity and justice (Adams, 1965; Homans, 1958). According to the tenets of Social Exchange Theory (Cropanzano & Mitchell, 2005), when one social actor supplies a benefit to another, it generates an obligation for receiver; thus, the receiver will reciprocate with an equal (implicit and unspecified) benefit in order to fulfil the obligation (Blau, 1964). An equal exchange stimulates feelings of individual commitment, appreciation, and trust (Blau, 1964, p. 93). An inequitable exchange, however, violates the social expectations of the service encounter (Blau, 1964).

Consumers judge the equity of service exchanges by evaluating the implicit and unspecified obligations generated by the exchange and then appraising whether those obligations have been delivered (Blau, 1964). We propose that when consumers perceive that the equity of a service encounter is weighted in the service provider's

favour (i.e. that the consumer has contributed more than the service provider), they are more likely to take advantage of the asymmetrical behavioural expectations of exchange and engage in misbehaviour to rectify the unjust or unfair nature of the service encounter. Thus, perceived justice is likely to mediate the relationships between service quality dimensions and consumer misbehaviour.

Consumers appraise the perceived justice of service encounters using three distinct but related dimensions: (1) distributive justice, which focuses on the actual service recovery outcome; (2) procedural justice, which focuses on the process of service delivery interactional justice; and (3) interactional justice, which focuses on the service provider-consumer exchange (Smith & Bolton, 2002). As Austin (1979, p. 24) notes, '[j]ustice pertains not merely to outcome distributions, but also to how the distribution is arrived at and the manner by which it is implemented'.

While early research often only investigated one or two of the justice dimensions (e.g., McCullough, Berry, & Yadav, 2000; Oliver & Swan, 1989; Palmer, Beggs, & Keown-McMullan, 2000), recent research links all three justice dimensions to behavioural intentions (Smith & Bolton, 2002; Tax, Brown, & Chandrashekaran, 1998). Low levels of distributive, procedural and interactional justice have been empirically linked to more negative word-of-mouth, low levels of satisfaction, and reduced repurchase intentions (Davidow, 2003; McCullough et al., 2000; Palmer et al., 2000).

In health service encounters, like most professional service, the technical quality of the service delivery is often inseparable from the interpersonal quality exhibited by

the service provider (Johnson & Zinkham, 1991). Consequently, we propose that the three dimensions of perceived justice will moderate the impact of both technical and interpersonal quality on consumer misbehaviour. We thus hypothesis the following:

H3. Distributive justice mediates the relationship between interpersonal service quality and (a) refusal to participate and (b) verbal abuse.

H4. Distributive justice mediates the relationship between technical service quality and (a) refusal to participate and (b) verbal abuse.

H5. Procedural justice mediates the relationship between interpersonal service quality and (a) refusal to participate and (b) verbal abuse.

H6. Procedural justice mediates the relationship between technical service quality and (a) refusal to participate and (b) verbal abuse.

H7. Interactional justice mediates the relationship between interpersonal service quality and (a) refusal to participate and (b) verbal abuse.

H8. Interactional justice mediates the relationship between technical service quality and (a) refusal to participate and (b) verbal abuse.

2.4 The mediating role of anger

Although consumers are often proposed to be rational and objective participants in exchange, emotions 'pervade social exchange processes' (Lawler & Thye, 1999, p. 218). Lawler's (2001) Affect Theory of Social Exchange posits that the outcomes of exchange have an affective impact that varies in form and intensity. This theory also posits that social exchanges require interdependence; consequently, the affect that

arises from exchange influences how social actors perceive their interaction, their relationship with the other social actor, and their social affiliations (Lawler, 2001).

Emotions are particularly salient within health service encounters due to the trust that these services require (Halliday, 2004). When consumers engage with health care providers, they must place their trust in 'the other's knowledge, competence and motive' (Pearce, 1974, p. 246). If that trust is (perceived to be) violated, consumers experience betrayal, which is 'the perceived violation of by a partner of an implicit or explicit relationship-relevant norm' (Finkel, Rusbult, Kumashiro, & Hannon, 2002, p. 957). Betrayal results in a range of negative emotions that may drive subsequent misbehaviour (Grégoire & Fisher, 2007).

Extremely negative consumer behaviour is often preceded by high emotional intensity (Bradfield & Aquino, 1999) because intense emotions are the mechanistic link between stimulus and its behavioural response (Weiss, Suckow, & Cropanzano, 1999). In particular, extant research states that service failure often results in consumer anger (Nguyen & McColl-Kennedy, 2003) and that anger is frequently associated with revenge and retaliatory impulses (Barclay, Skarlicki, & Pugh, 2005).

Given the role of anger in predicting retaliatory behaviour, we propose that consumers are likely to respond with some anger to service encounters that they perceive lack appropriate technical and/or interpersonal service quality. This anger will influence the consumer misbehaviour displayed in response. Thus, the following hypotheses are proposed:

H9. Anger mediates the relationship between interpersonal service quality and (a) refusal to participate and (b) verbal abuse.

H10. Anger mediates the relationship between technical service quality and (a) refusal to participate and (b) verbal abuse.

3.0 Method

In order to investigate how two dimensions of service quality (i.e. technical quality and interpersonal quality) influence consumer misbehaviour in the context of health services, this study was conducted using a 2 (high/low level) x 2 (technical and interpersonal quality) between-subjects factorial design administered via online written survey. Experimental design provides more persuasive support for causality than traditional exploratory or descriptive research designs due to the manipulation of the supposed causal construct (Churchill & Iacobucci, 2005). This design is particularly appropriate for consumer misbehaviour research because there is a strong social desirability bias inherent in self-reporting inappropriate, unethical, or illegal behaviour (Chung & Monroe, 2003; Fisher & Katz, 2000; Philip M. Podsakoff & Organ, 1986).

3.1 Sample and procedure

Participants for this study were recruited from the market research arm of the national postal service, Australia Post. With over 2.1 million potential respondents listed (from an approximate Australian population of 22 million), this sampling frame comprises a convenience sample that is reasonably representative of the adult Australian

population. Members of this sampling frame have opted to receive communications from Australia Post and thus did not receive any incentive for their participation.

A total of 108 respondents participated in this study. As Hair and colleagues (2006) recommend that experiments have a minimum cell size of 20 observations (provided that those 20 are greater than the number of dependent variables), this sample provides appropriate statistical power and validity. To ensure the internal validity of the experimental design, each respondent was randomly assigned to one of the four experimental conditions.

First, participants were asked to read a scenario and then rate the likelihood of different forms of refusing to participate and verbal abuse occurring. Manipulation checks were then conducted to test that the experiment had the desired effect on perceptions of interpersonal quality and technical quality. Next, respondents' perceptions of the distributive, procedural, and interactional justice, as well as their perception of anger in response to the scenario, was measured. Consumer misbehaviour was measured before cognitive or emotional responses to reduce common method variance due to the respondents being led by the survey design (P.M. Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Finally, some basic demographic information (e.g. gender, age cohort, citizenship, occupation, and level of customer contact) was collected. Participants were instructed to respond to questions as honestly as possible because there were no right answers; the researchers were looking for general trends rather than individual differences.

The scenario describes the health care encounter of a gender-neutral third party called Sam, who visits a new physiotherapist to seek treatment for a serious injury. The scenario is written in third person to control for the social desirability bias inherent in admitting to deviant behaviour (Chung & Monroe, 2003; Fisher & Katz, 2000). Gender bias was controlled using the gender-neutral name 'Sam', which can refer to the masculine name 'Samuel' or the feminine name 'Samantha'. Although written scenarios are occasionally criticised for being low involvement (Greenberg & Eskew, 1993), such scenarios allow consumer behaviour researchers to explicitly manipulate service encounter variables without violating ethical standards (Schoefer & Ennew, 2005). As a result, written role-playing scenarios have been widely used in consumer and services research (e.g., Bui, Krishen, & Bates, 2011; Kim & Wansink, 2012; Zhou, Huang, Tsang, & Zhou, 2013). The scenario began as follows:

> Sam makes an appointment to see a **new** physiotherapist at a **new** clinic to treat some recurring wrist pain. This pain is severe enough to affect Sam's ability to work. Sam begins the appointment by explaining the injury.

This introduction controls for prior relationship with the service provider (note bold). Following this introduction, each of the four manipulations then outlined the service encounter that Sam experienced.

Interpersonal quality was manipulated by altering the interpersonal manner and communication that Sam received (Dagger et al., 2007). Technical quality was manipulated by altering the expertise demonstrated by the service provider and the eventual service outcome (Dagger et al., 2007). When these manipulations were

combined, the scenarios escalated from an experimental group that received low technical and low functional quality to a control group that received high technical and high functional quality (see Table 1).

[Insert Table 1 about here]

3.2 Measures

Refusal to participate and *verbal abuse* were measured using eight Rasch subscales from Keeffe (2010). Respondents were asked to rate the likelihood (1= 'very unlikely', 5= 'very likely') that a third party would engage in an example of misbehaviour during a service scenario. *Distributive justice, procedural justice* and *interactional justice* were measured using four, two, and four summated items respectively from Smith and colleagues (1999), which were adapted to match the third person perspective of the research. *Anger* was measured using six summated items from Laros and Steenkamp's (2005) hierarchy of emotions in consumer behaviour. *Interpersonal quality* and *technical quality* were measured using three summated items each from Dagger and colleagues (2007), which were adapted to match the third person perspective of the research. *Realism* and *credibility* were measured using four individual items adapted from Sparks and McColl-Kennedy (2001). The items, item-to-total correlations (where appropriate), factor loadings, and reliability statistics (i.e., Person Separation Index and Cronbach's alpha scores) are reported in Table 2.

[Insert Table 2 about here]

3.3 Analysis

In order to examine the impact of interpersonal and technical service quality on refusal to participate and verbal abuse, as well as the mediating influence of distributive justice, procedural justice, interactional justice, and anger, path modelling was employed. Initially, the *refusal to participate* and *verbal abuse* subscale scores were computed using Rasch modelling in RUMM2020. Next, path modelling applying maximum likelihood estimation in Amos Version 18 was used to examine the hypothesised relationships between the variables in the conceptual framework (Hair, Black, Babin, & Anderson, 2010). The manipulated independent variables (i.e., interpersonal and technical service quality) and mediating variables (i.e., three forms of justice and anger) were modelled as observed variables, while the two forms of consumer misbehaviour were modelled as latent variables comprising the eight computed subscale scores. Model fit was assessed using two absolute fit indices, the chi-square ($\chi 2$) measure and the Root Mean Squared Error of Approximation (RMSEA), and two incremental fit indices, the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI).

4.0 Results

4.1 Sample characteristics

Initially, the sample composition, biases, power and validity were explored. The sample comprised 108 respondents (a response rate of 3.5%): 25 (23.6%) males, 81 (76.4%) females, and two respondents (1.9%) of unspecified gender. The respondents were distributed across the three generational cohorts of Baby Boomers (43%), Generation X (22.4%), and Generation Y (34.6%). Nearly two thirds of respondents (64.8%) reported that they currently held jobs that required direct, regular customer

contact and 99 (91.7%) reported that they were Australian citizens. Nearly three quarters of respondents reported that they were familiar with the service scenario of attending an appointment with a physiotherapist. Due to the imbalance in the sample of both gender and service familiarity, two independent-samples t-tests were conducted to compare the consumer misbehaviour subscale scores for both males and females, and for consumers that were familiar and unfamiliar with the physiotherapy service scenario. There were no significant differences in *verbal abuse* or *refusal to participate* subscale scores based on gender or service familiarity.

4.2 Manipulation checks

Two manipulation tests were conducted. First, a two-way MANOVA was performed to explore whether the experimental manipulation of technical and interpersonal service quality worked as desired. There was a statistically significant main effect for both interpersonal quality [F(2,103)=23.584; p=.000; Pillai's Trace=.314; partial eta2=.314] and technical quality [F(2,103)=14.301; p=.000; Pillai's Trace=.217; partial eta2=.217], but no statistically significant interaction effects between interpersonal and technical quality. When the results for the dependent variables are considered separately using a Bonferroni adjusted alpha level of .025, there were statistically significant differences for the main effects of both interpersonal and technical quality and the effect sizes were large (see Table 3).

[Insert Table 3 about here]

Next, the realism and credibility of the scenarios was examined. Mean scores for each of the four scenarios suggested that respondents agreed that the situation could have occurred in real life (Scenario 1 M=5.52, SD=2.086; Scenario 2 M=5.68, SD=1.492;

Scenario 3 M=5.77, SD=1.336; Scenario 4 M=5.79, SD=1.707), they were able to take on the role of Sam in the scenario (Scenario 1 M=5.13, SD=1.984; Scenario 2 M=4.45, SD=1.729; Scenario 3 M=4.69, SD=1.806; Scenario 4 M=5.25, SD=2.030), there were similar service situations in real life (Scenario 1 M=5.78, SD=1.808; Scenario 2 M=5.81, SD=1.276; Scenario 3 M=6.19, SD=1.167; Scenario 4 M=6.21, SD=1.166), and that the scenario was believable (Scenario 1 M=6.22, SD=1.242; Scenario 2 M=5.87, SD=1.408; Scenario 3 M=5.81, SD=1.600; Scenario 4 M=6.18, SD=1.517). As a result of these realism and credibility tests, the scenarios were deemed to operate as intended within the study.

4.3 Preliminary data analysis

A preliminary analysis of the variables was conducted. This involved assessing the means, standard deviations, and correlations of the continuous variables. The results (see Table 4) all appear to be appropriate given the experimental research design and topic under investigation.

[Insert Table 4 about here]

4.4 Model fit and hypothesis testing

Path modelling was used to examine the hypothesised relationships in the conceptual framework (Hair et al., 2010) (see Figure 1). Estimating the model produced a significant chi-square value ($2(55) = 96.955$, $p = .000$), which is unsurprising given its sensitivity to sample size and non-normality (Anderson & Gerbing, 1988). However, the other fit measures indicated an adequate fit to the data (RMSEA = .08; CFI = .98; TFI = .96) (MacCallum, Browne, & Sugawara, 1996).

An examination of the squared multiple correlations indicated that the proposed model explained 33.1% of the variance in the second-order *refusal to participate* factor and 50.2% of the variance in the second-order *verbal abuse* factor. Further, the second-order factor *refusal to participate* explained between 68.2% and 93.8% of the variance in the five subscale scores and the second-order factor *verbal abuse* explained between 84.3% and 92.1% of the variance in the three subscale scores.

[Insert Figure 1 about here]

Hypothesis 1 and 2 both investigate the influence of service encounter quality on consumer misbehaviour. Hypothesis 1 proposes that *interpersonal service quality is negatively related to (a) refusal to participate and (b) verbal abuse*. This hypothesis was not supported for either form of consumer misbehaviour. Both standardised path estimates were weak and non-significant ($\beta = .143$, $p = .171$ and $\beta = .068$, $p = .461$ respectively). Further analysis shows that interpersonal service quality has no direct effect on refusal to participate (std. direct effect = .143, p = .157) or verbal abuse (std. direct effect = .068, p = .529). Hypothesis 2 posits that technical service quality is negatively related to (a) refusal to participate and (b) verbal abuse. Once again, this hypothesis is not supported for either form of consumer misbehaviour. Both standardised path estimates are weak and non-significant ($\beta = .018$, $p = .840$ and $\beta = .031$, $p = .699$ respectively). Further analysis shows that technical service quality has no direct effect on refusal to participate (std. direct effect = .018, p = .857) or verbal abuse (std. direct effect = .031, p = .704). Thus, neither interpersonal nor technical service quality has a direct effect on the consumer misbehaviour under investigation.

Given that there is no direct relationship between service encounter quality and consumer misbehaviour, Hypotheses 3 to 10 investigate whether service encounter quality has an indirect effect on consumer misbehaviour through the mediating effects of perceived justice and anger. The analysis shows that interpersonal service quality has a moderate indirect effect on both refusal to participate (std. indirect effect = -.332 p =.000) and verbal abuse (std. indirect effect = -.390, p = .000). Technical service quality also has a moderate indirect effect on verbal abuse (std. indirect effect = -.225, p = .079) but not on refusal to participate (std. indirect effect = -.125, p = 002).

In order to establish which construct(s) acted as mediators, the standardised regression weights are examined. All of the perceived justice standardised path estimates are weak and non-significant; however, the standardised path estimates for anger are both strong and significant (Anger → Refusal to participate β = .644, p = .000; Anger → Verbal abuse β = .577, p = .000). These results suggest that anger mediates the effect of service encounter quality (particularly interpersonal service quality) on consumer misbehaviour, while the three forms of perceived justice do not play significant mediating roles. These findings provide support for Hypotheses 9 and 10, but not for Hypotheses 3 to 8.

5.0 Discussion

This study aimed to investigate whether lower than expected perceived service quality is capable of generating cognitive and emotional appraisals that trigger consumer misbehaviour. Using Social Exchange Theory (Blau, 1964) as a theoretical framework, we proposed that technical and interpersonal service quality would

influence consumers' cognitive and affective appraisals of the service encounter, which would in turn increase the likelihood that consumers would refuse to participate or verbally abuse the service provider.

5.1 Theoretical implications

This study has a number of theoretical implications for the field of services marketing. First, consistent with the emergence of Service Dominant Logic (Vargo & Lusch, 2004, 2008), the study provides empirical evidence that marketers should consider the social aspects of exchange in order to better understand the drivers of consumer misbehaviour. When the relationship with the service provider is controlled, interpersonal service quality has an inverse, indirect effect on both verbal abuse and refusal to participate, while technical quality has an indirect effect on verbal abuse. Technical service quality was not as indirectly impactful on both forms of consumer misbehaviour as interpersonal quality, but this is unsurprising considering the extent of interpersonal interaction and the high credence qualities that define health care services. Together, these findings suggest that low levels of service quality may be deemed to threaten the achievement of consumers' service goals if they are appraised negatively. In particular, more easily appraised elements of service quality, such as interpersonal quality, are more likely to have a significant indirect influence on misbehaviour.

Second, when examining the mediating role of emotion and cognition, the results show that anger fully mediates the relationship between perceived service quality and consumer misbehaviour. This finding provides empirical support for Lawler and Thye's (1999) assertion that emotions 'pervade social exchange processes'. As a

discrete emotion that is high in emotional intensity (Bradfield & Aquino, 1999; Laros & Steenkamp, 2005), even a very modest increase in anger may create the necessary conditions to cause misbehaviour.

Conversely, perceived justice did not mediate the relationship between perceived service quality and consumer misbehaviour. This counterintuitive result may be explained in two ways. First, consumers who perceive that they have been treated inequitably may choose to address that inequity through more "legitimate" or appropriate forms of behaviour (e.g. complaint or exit) (Dominique A. Keeffe, Russell-Bennett, & Tombs, 2007). Alternately, perceived justice may mediate the relationship between service quality and anger (Schoefer & Ennew, 2005), suggesting that cognitive evaluations inform emotional responses. Both of these proposals require further investigation. Although perceived justice did not appear to be a significant mediator of the impact of service quality on subsequent refusal to participate or verbal abuse, the overarching results suggested that social factors (i.e., interpersonal service quality) were significantly more impactful than technical factors (i.e., technical quality) on the two types of consumer misbehaviour.

Taken as a whole, these results show that services do not have to fail or require recovery in order to trigger consumer misbehaviour. A mere reduction in perceived service quality is capable of generating negative cognitive and emotional appraisals that can trigger consumer misbehaviour. This finding extends our nascent understanding of consumer misbehaviour and adds a level of complexity to recent investigations in the field.

5.2 Managerial implications

The study findings also raise a number of implications for service managers. Traditionally, the health care industry has prioritised the pursuit of technical quality over interpersonal quality (Donabedian, 1992). However, low interpersonal service quality has a stronger indirect impact on verbal abuse and refusal to participate. Consequently, once health care providers reach an appropriate standard of technical service quality, their managers should consider redirecting some of their time and financial resources from the professional development of technical service delivery to the professional development of interpersonal service quality. Such development may include training in "softer" relational skills such as active listening, body language, and emotion management in order to improve the quality of dyadic interactions and reduce instances of low interpersonal quality.

Further, the results suggest that anger is a key mediator of the relationship between low perceived service quality and consumer misbehaviour. Given that anger is a precursor to potential misbehaviour, health care providers may be able to mitigate the impact of consumer misbehaviour by identifying patients who exhibit signs of anger and deescalating that emotion before it triggers a negative behavioural response. Given that this strategy would require a significant level of emotional intelligence and emotional labour, health care managers could deliberately recruit health care providers that are proficient in these skills or are capable of developing them.

5.3 Limitations and future research opportunities

When considering the results of this study, several limitations and future research opportunities must be acknowledged. First, the data for this study was collected using

a single experiment. Although care was taken to design this experiment appropriately, future research could replicate and extend this experiment to improve its external validity. Second, while the sample size for this study was appropriate for the experimental design and analytic technique, replicating this study with a larger sample would present an opportunity to conduct more fine-grained analysis with a full structural equation model. Finally, this study examined the two most common forms of consumer misbehaviour reported in health care services. However, consumers can exhibit a wide variety potential misbehaviour, all of which present interesting avenues for future research in the field.

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Table 1: Experimental Scenarios

	Low Interpersonal Quality	***High Interpersonal Quality***
Low Technical Quality	*Scenario 1:* Sam makes an appointment to see a **new** physiotherapist at a **new** clinic to treat some recurring wrist pain. This pain is severe enough to affect Sam's ability to work. Sam begins the appointment by explaining the injury. The physiotherapist appears distracted while listening to Sam and tersely interrupts the explanation to say that the injury is clearly very minor and must not be particularly painful. Without examining Sam's wrist, the physiotherapist gives Sam a standard list of daily exercises to complete at home. Sam is not shown how to do the exercises. Without consultation, the physiotherapist then informs Sam how the injury will be treated in later appointments. Finally, the physiotherapist asks Sam to read some information on pain management, complete a detailed medical history form, and advises that it would be best to stop taking pain medication prior to the next appointment. Sam's next appointment is in two weeks' time.	*Scenario 2:* Sam makes an appointment to see a **new** physiotherapist at a **new** clinic to treat some recurring wrist pain. This pain is severe enough to affect Sam's ability to work. Sam begins the appointment by explaining the injury. The physiotherapist listens carefully to Sam and empathises about how serious and painful the injury must be. Without examining Sam's wrist, the physiotherapist gives Sam a standard list of daily exercises to complete at home. Sam is not shown how to do the exercises. The physiotherapist then explains the possible treatment options to Sam and agrees to treat the injury in later appointments using the method that they both think will be most successful. Finally, the physiotherapist asks Sam to read some information on pain management, complete a detailed medical history form, and advises that it would be best to stop taking pain medication prior to the next appointment. Sam's next appointment is in two weeks' time.
High Technical Quality	*Scenario 3:* Sam makes an appointment to see a **new** physiotherapist at a **new** clinic to treat some recurring wrist pain. This pain is severe enough to affect Sam's ability to work. Sam begins the appointment by explaining the injury. The physiotherapist appears distracted while listening to Sam and tersely interrupts the explanation to say that the injury is clearly very minor and must not be particularly painful. After examining Sam's wrist, the physiotherapist creates Sam a	*Scenario 4:* Sam makes an appointment to see a **new** physiotherapist at a **new** clinic to treat some recurring wrist pain. This pain is severe enough to affect Sam's ability to work. Sam begins the appointment by explaining the injury. The physiotherapist listens carefully to Sam and empathises about how serious and painful the injury must be. After examining Sam's wrist, the physiotherapist creates Sam a personalised list of daily exercises to complete at home. Sam is shown how to do

	personalised list of daily exercises to complete at home. Sam is shown how to do each exercise. Without consultation, the physiotherapist then informs Sam how the injury will be treated in later appointments. Finally, the physiotherapist asks Sam to read some information on pain management, complete a detailed medical history form, and advises that it would be best to stop taking pain medication prior to the next appointment. Sam's next appointment is the following day.	each exercise. The physiotherapist then explains the possible treatment options to Sam and agrees to treat the injury in later appointments using the method that they both think will be most successful. Finally, the physiotherapist asks Sam to read some information on pain management, complete a detailed medical history form, and advises that it would be best to stop taking pain medication prior to the next appointment. Sam's next appointment is the following day.

Table 2: Measurement Scales

	Refusal to Participate
Source	Keeffe (2010)
Scale	Five-point Likert scale anchored at endpoints (1= very unlikely, 5 = very likely)
Refusal to Engage Subscale	
Items	**1.** Refuse to read important service-related information provided by the service provider **2.** Refuse to communicate with the service provider in favour of corresponding with someone else **3.** Refuse to communicate further with the service provider **4.** Refuse to answer questions from the service provider **5.** Refuse to discuss the possible outcomes of the service, despite expecting an appropriate service outcome
	Person Separation Index .904
Refusal to Comply Subscale	
Items	**1.** Refuse to listen to the service provider's advice, despite expecting a successful service to occur **2.** Fail to comply with the service provider's instructions, even though compliance is necessary for a successful service **3.** Refuse to answer or return the service provider's phone calls or emails **4.** Refuse to accept the service provider's professional advice, but still expect the issue to be resolved
	Person Separation Index .893
Refusal to Devote Time/Effort Subscale	
Items	**1.** Refuse to prepare for appointments (e.g. bring information, complete exercises) **2.** Refuse to attend more than one appointment, even if multiple appointments are necessary **3.** Insist that the service provider perform tasks (e.g. complete paperwork) that the client should complete **4.** Try to rush through the appointment but still expect a successful service outcome **5.** Refuse to allow the service provider adequate time to complete the required service tasks
	Person Separation Index .900
Refusal to Provide Accurate Information Subscale	
Items	**1.** Exaggerate the amount of preparation conducted prior to an appointment **2.** Complete required client forms inaccurately **3.** Omit sensitive information (e.g. information about undesirable or inappropriate behaviour) from the information provided to the service provider **4.** Withhold important information **5.** Lie about having read any service-related information provided by the service provider **6.** Lie to the service provider about personal information that is critical to the service **7.** Lie to the service provider in order to reduce the length of the service and the number of appointments required

		Person Separation Index	**.950**
Refusal to Provide Accurate Information Subscale			
Items	**1.** Refuse to pay for the service		
	2. Attempt to evade paying for the service		
	3. Promise to pay the service provider's fees but then fail to pay		
		Person Separation Index	**.921**
	Verbal Abuse		
Source	Keeffe (2010)		
Scale	Five-point Likert scale anchored at endpoints (1= very unlikely, 5 = very likely)		
Incivility Subscale			
Items	**1.** Deliberately talk over the service provider		
	2. Write something offensive on a client form		
	3. Say something rude		
	4. Swear		
	5. Berate the service provider		
	6. Leave an aggressive phone message for the service provider		
	7. Scream at the service provider		
		Person Separation Index	**.963**
Threats Subscale			
Items	**1.** Threaten to report the service provider to their manager		
	2. Threaten to take their business elsewhere		
	3. Threaten to make a false statement to official regulators or an Ombudsman		
	4. Threaten to get the service provider sacked		
	5. Threaten to call the police on false grounds		
	6. Threaten the service provider with violence		
	7. Threaten to kill the service provider		
		Person Separation Index	**.917**
Personal Attack Subscale			
Items	**1.** Use a patronising tone with the service provider		
	2. Make a comment designed to humiliate the service provider		
	3. Make a nasty comment about the service provider		
	4. Question the service provider's ability to do their job		
	5. Make a defamatory comment about the service provider		
	6. Illegitimately accuse the service provider of incompetence		
	7. Make an insulting personal comment about the service provider		
		Person Separation Index	**.942**
	Distributive Justice		
Source	Adapted from Oliver & Swan (1989) and Tax (1993) by Smith et al. (1999)		
Scale	Five-point Likert scale anchored at endpoints (1= strongly disagree, 5= strongly agree)	**Item-Total Correl.**	**Factor Loadings**
Items	**1.** The outcome Sam received was fair.	.867	.929
	2. Sam got what he/she deserved.	.774	.867
	3. In resolving the problem, the physiotherapist gave Sam what was needed.	.869	.931
	4. The outcome Sam received was right.	.918	.958
		Cronbach's alpha	**.939**

	Procedural Justice		
Source	Adapted from Oliver & Swan (1989) and Tax (1993) by Smith et al. (1999)		
Scale	Five-point Likert scale anchored at endpoints (1= strongly disagree, 5= strongly agree)	**Item Corr.**	
Items	**1.** The length of time taken to resolve Sam's problem was no longer than necessary.	.793	
	2. The physiotherapist showed adequate flexibility in dealing with Sam's problem.	.793	
	Cronbach's alpha	**.885**	
	Interactional Justice		
Source	Adapted from Oliver & Swan (1989) and Tax (1993) by Smith et al. (1999)		
Scale	Five-point Likert scale anchored at endpoints (1= strongly disagree, 5= strongly agree)	**Item-Total Corr.**	**Factor Loadings**
Items	**1.** The physiotherapist was appropriately concerned about Sam's problem.	.941	.967
	2. The physiotherapist put the proper effort into resolving Sam's problem.	.947	.971
	3. The physiotherapist's communications with Sam were appropriate.	.966	.982
	4. The physiotherapist gave Sam the courtesy he/she was due.	.910	.949
	Cronbach's alpha	**.977**	
	Anger		
Source	Laros and Steenkamp (2005)		
Scale	Seven-point Likert scale anchored at endpoints (1= not at all, 5= very)	**Item-Total Corr.**	**Factor Loadings**
Items	**1.** Angry	.797	.857
	2. Frustrated	.887	.928
	3. Irritated	.893	.932
	4. Hostile	.683	.762
	5. Unfulfilled	.885	.926
	6. Discontented	.851	.903
	Cronbach's alpha	**.944**	
	Interpersonal Quality		
Source	Adapted from Dagger, Sweeney and Johnson (2007)		
Scale	Seven-point Likert scale anchored at endpoints (1= strongly disagree, 7= strongly agree)	**Item-Total Corr.**	**Factor Loadings**
Items	**1.** The interaction Sam had with the physiotherapist was of a high standard.	.932	.91
	2. The interaction Sam had with the physiotherapist was excellent.	.842	.959
	3. Sam would have felt good about the interaction with the physiotherapist.	.776	.944
	Cronbach's alpha	**.955**	
	Technical Quality		
Source	Adapted from Dagger, Sweeney and Johnson (2007)		

Scale	Seven-point Likert scale anchored at endpoints (1= strongly disagree, 7= strongly agree)	**Item-Total Corr.**	**Factor Loadings**
Items	**1.** The quality of care Sam received was excellent.	.919	.965
	2. The care provided by the physiotherapist was of a high standard.	.947	.978
	3. Sam was impressed by the care provided by the physiotherapist.	.642	.896
	Cronbach's alpha	**.943**	
	Realism and Credibility		
Source	Adapted from Sparks and McColl-Kennedy (2001)		
Scale	Four single items with a seven-point Likert scale anchored at endpoints (1= strongly disagree, 7= strongly agree)		
Item	I think this situation could have occurred in real life.		
Item	I was able to take on the role of Sam in this scenario.		
Item	I think there are service situations like this in real life.		
Item	This scenario is believable.		

Table 3: Tests of Between-Subjects Effects for Experimental Manipulation

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Interpersonal Service Quality	153.685[a]	3	51.228	22.710	.000	.396
	Technical Service Quality	160.637[b]	3	53.546	24.740	.000	.416
Intercept	Interpersonal Service Quality	826.467	1	826.467	366.383	.000	.779
	Technical Service Quality	752.158	1	752.158	347.529	.000	.770
IQ	Interpersonal Service Quality	61.846	1	61.846	27.417	.000	.209
	Technical Service Quality	58.446	1	58.446	27.004	.000	.206
TQ	Interpersonal Service Quality	89.815	1	89.815	39.816	.000	.277
	Technical Service Quality	102.606	1	102.606	47.408	.000	.313
IQ * TQ	Interpersonal Service Quality	5.605	1	5.605	2.485	.118	.023
	Technical Service Quality	4.110	1	4.110	1.899	.171	.018
Error	Interpersonal Service Quality	234.598	104	2.256			
	Technical Service Quality	225.087	104	2.164			
Total	Interpersonal Service Quality	1268.556	108				
	Technical Service Quality	1193.333	108				
Corrected Total	Interpersonal Service Quality	388.283	107				
	Technical Service Quality	385.724					

a. R Squared = .396 (Adjusted R Squared = .378)

b. R Squared = .416 (Adjusted R Squared = .400)

Table 4: Descriptive statistics and correlations

	Mean	SD	Anger	PJ	DJ	IJ	Incivil	Threat	Personal Attack	Ref to Engage	Ref to Comply	Ref to Devote Time/Effort	Refuse to Pro Acc Info	Refuse to Pay
Anger	4.2346	1.88011	1											
Procedural Justice	2.4398	1.25437	-.705**	1										
Distributive Justice	2.5046	1.24835	-.674**	.896**	1									
Interactional Justice	2.4167	1.35343	-.706**	.903**	.921**	1								
Incivility	-1.9043	2.52864	.603**	-.474**	-.467**	-.477**	1							
Threat	-1.6498	1.94861	.692**	-.534**	-.530**	-.514**	.853**	1						
Personal Attack	-1.6528	2.48894	.658**	-.575**	-.537**	-.576**	.893**	.875**	1					
Refuse to Engage	-0.3210	1.63164	.560**	-.377**	-.357**	-.376**	.621**	.619**	.639**	1				
Refuse to Comply	-0.0501	1.96539	.520**	-.330**	-.293**	-.341**	.559**	.573**	.605**	.911**	1			
Refuse to Devote Time/Effort	-0.2118	1.52891	.545**	-.340**	-.311**	-.334**	.610**	.596**	.637**	.914**	.895**	1		
Refuse to Provide Accurate Information	-0.5820	2.28048	.408**	-.248**	-.171	-.210*	.502**	.475**	.499**	.872**	.883**	.842**	1	
Refuse to Pay	-0.1641	2.37701	.531**	-.340**	-.339**	-.374**	.648**	.655**	.611**	.818**	.763**	.767**	.714**	1

Figure 1: Structural Model